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A COURSE OF CLINICAL LECTURES

Delivered at the Hôtel Dieu, Paris, for the Session 1842–'43.

BY A. F. CHOMEL, M. D.

LECTURE XII.

RESUMÉ OF THE ANNUAL CLINIC.

(Continued.)

Diseases of the Uterus and of the Hypogastric Region.

We have had thirty-four cases of phlegmasiæ of the organs of this region. Under this head is not only included those affections of the uterus and its appendages following delivery, but also those due to causes unconnected with the puerperal state. Except six cases, all the others followed directly or indirectly this state. I have had frequent occasion to remark, and repeat it again at this time, on the great dangers which women incur in quitting too soon those establishments in which they have been confined. Of this fact we have had incontestable proof in the numerous cases which have fallen under our observation. Thus, of eight women who died of puerperal metritis, seven left the hospital before the seventh day, and one on the eighth. The danger of two early exposure to newly delivered women is so great, that it ought to awaken the attention of the administration of hospitals, and regulations should be enacted which would prevent these unfortunate women from leaving the hospitals before they were in a condition to attend to their affairs. You must snatch them, in spite of themselves, from certain danger.

The symptoms which announce this affection are, at the commencement, a chill, then ill-defined pains in the hypogastric region, the foetid smell of the lochia, more or less fever, general prostration of the forces, &c. &c. When these symptoms are present, you have every reason to suspect the commencement of uterine disease, or of some phlegmasia of the appendages of the organ. When the uterus is sensitive to the touch, and more voluminous than it should be naturally, there can be no doubt of its condition. Sometimes the broad ligaments and the surrounding cellular tissue is the seat of inflammation. In this case, if you explore the parts by an examination per vaginam, through the abdomen, and by the introduction of the finger into the rectum, you will distinguish a tumour more or less elastic, or fluctuating, and which sometimes terminates in resolution, but more frequently opens either into the rectum, bladder, or sometimes vagina. Whenever the physician observes the symptoms which I have just mentioned, joined to active febrile disturbance, which cannot be otherwise accounted for, he should immediately direct his attention to these parts. The diseases in question are sometimes developed in a latent form; at other times they simulate, at the commencement, rheumatic or neuralgic affections, by pain in the neighbourhood of the large joints, and along the course of the nerves, or large vessels. Sometimes at the same time with pain, swelling of the larger extremities occur. The cause of these symptoms is not too well known; but, very commonly you will find on a careful examination, a tumour in the pelvis, or elsewhere, pressing on the great venous trunks. You meet with the same symptoms frequently in men, who suffer from tumours of the rectum. You also see retractions of the extremities, sciatic neuralgias, which can be referred to no other cause. Thus then, these diseases are of highly practical interest, for it is only by an exact acquaintance with the precise nature of these affections that you can employ suitable remedies. Among the facts of this kind there are several very remarkable ones. Among others I recall the case of the woman who died, and in whom we found a tumour in the hypogastric region, communicating with a sac, and with the uterus itself, and gangrened to a considerable extent. This patient, at her entrance, was in a state of considerable febrile excitement, with a fetid discharge from the external organs of generation. After several days of treatment she improved, but of a sudden all her symptoms became aggravated, pus was discharged by the intestines, and the condition of the patient became worse and worse, until she died. At the autopsy we found the local lesions that I have just mentioned. It was difficult to explain, in a satisfactory manner, the connection of these disorders with the symptoms observed during life, and to know if the gangrene of the uterus was the principal disease, and if it had preceded the other disorders. The woman being newly delivered gave us a clue to an explanation of the fact that the uterine disease was most probably the principal affection, and that first developed.—I will mention also, the case of gangrenous metro-vaginitis, which terminated in death, which occurred lately in our wards, and a similar case at present, of a woman in the same bed, and who besides is affected with variola. I will mention also the case of metritis, which ended fatally, and in which we found suppuration of the uterine veins.

We have had two cases of abscess of the fallopian tubes, which terminated fatally. In one case the abscess opened into the peritoneum, producing fatal peritonitis; the other was a phlegmonous tumour situated in the ovary.

Such were the most grave of our uterine diseases. We had a number of others, which I designate by the name of post-puerperal metritis, much less gave than the preceding, and which commonly terminated in resolution.

Independently of the cases of metritis connected with the puerperal state, we had six cases of simple spontaneous metritis. With regard to their etiology, we saw two cases preceded by suppression of the catamenia; two other cases followed severe fatigue; in the remaining two no appreciable cause could be discovered. All these six cases recovered. It is not rare to see metritis of this kind appear without any appreciable or known cause. There exists, as in probably all cases of essential phlegmasia, some general predisposition in the organism, which is the

true cause, and which produces its influence under the slightest occasional cause.

We have had nineteen cases of uterine hemorrhage four of which followed abortion. This cause is by no means at all times easy to ascertain. Women, from different motives, which it is easy to comprehend, are often interested in hiding this circumstance, and it is sometimes not without a good deal of address, that you are able to discover it. In one case the hemorrhage seemed to have followed a suppression of the menses, caused by cold; three others seemed to be owing to some deviation of the uterus, sometimes anteriorly, and sometimes posteriorly; finally, other cases depended on cancer of the neck of the uterus, or of the body itself. We have had several cases of granular metritis, a kind of metritis very different from that which accompanies ulceration of the neck. These granular metrites may be assimilated readily to the granular alteration of the larynx, which is, as you know, very distinct from the tuberculous or syphilitic alterations of that organ. This distinction is very important; and for this reason, that the metritis of which we speak is much less dangerous than the ulcerated metritis, and is usually easily cured, by one or more cauterizations with the nitrate of silver; a treatment which, in our hands, has never failed.

Eruptive Diseases.

Variola.—This year we have had thirty-seven cases of variola, of which five died; and three cases of very light varioloid. This word varioloid requires some explanation, in order to prevent misapprehension. It means to express an affection produced by a variolous virus, in individuals who from some peculiar circumstances, are rendered less apt to feel its effects in their worse form. By this word was wished to designate a product of the variolous virus more benign than the proper variolous virus; it is not, therefore, from any difference in the causes of these two diseases, that physicians were induced to create this new denomination, but on account of the modifications introduced into this last by the circumstances just enumerated. In fact, for a long time, it was admitted that those persons, who had once been attacked by small-pox, were not liable to it subsequently; in some way it was believed that vaccination offered the same immunity. But when, in 1816, in America, persons were attacked with secondary variola, after a first attack, and the same occured in those who had been vaccinated, and when the same phenomena were reproduced in France, it became impossible to refuse the evidence of facts, and it became necessary to admit this new eruption. It was called varioloid, whether it had appeared in persons already vaccinated, or who had suffered from a previous attack of variola, from the conviction which many physicians entertained that this secondary variola differed from the primitive one, and that another word was required to designate it. But later these facts multiplied, and it became clear to all unprejudiced minds, and whose eyes were open to evidence, that no real difference existed between the first and second affections, and that both originated from the same cause. Sometimes you see secondary variolas more severe than primitive ones. I recollect two individuals in our wards, side by side. One had a first attack of a variola; the other, one consecutive to vaccination. In the former the duration of the eruption was much shorter than the latter, and he recovered much sooner.

Hence, it is now established as a principle, that persons who have been vaccinated, are not invariably protected against an attack of small-pox, but that in general it is more benign and lighter. On this point there is at the present day general agreement. To the question, in what proportion does this occur, no satisfactory answer can be given, as our statistics on this point are not yet sufficient. In conclusion, therefore, the majority of physicians, as well as myself, consider variola and varioloid as perfectly identical.

Out of thirty-seven cases that we have had this year in the service, five died. Of these last, one was a young woman, who had œdematous laryngitis, with symptoms of suffocation, and who succumbed with this complication of diseases.

This class of affections is more common, in general, in summer than in winter. Out of the thirty-seven cases we had, twenty-four of them were in the summer semester and thirteen in the winter. This is about the ordinary proportion. The mortality, on the contrary, is greater in the winter than in the summer. There were three deaths out of thirteen cases in winter, and one only out of twenty-four cases in summer. Of these thirty-seven cases of variola, eighteen were discreet, and six were confluent and very grave, the others were intermediate. Out of the six cases of confluent small-pox, four died. With regard to sex; of these thirty-seven, twenty were men, and seventeen women, which from the greater number of men in our wards, gives about the same proportion. But the mortality was greatest among the men. In respect to age, the mortality was least between fifteen and twenty. This proportion was confirmed by the results of previous years. From them it results that the mortality was in persons between fifteen and twenty, one in eleven; and one in eight in those between twenty and thirty-five. Eleven individuals out of thirty-seven had been vaccinated and presented evident traces; seven others said that they had been, or had had a first attack of small-pox, but no trace of either assured us of the truth of the statement. Admitting, however, that of this number one-half had suffered as stated, it results that of the whole number affected with small-pox this year, that one-half had either been vaccinated, or had had small pox, which is a very considerable proportion. Out of the number indicated, eleven had not been vaccinated, or said so, and the rest, who did not recollect, showed no traces of cicatrices; nor had they had primitive variola. One only, of those who said that they had previously had variola, succumbed of confluent small-pox. Among those who had evident traces of vaccination, not one had confluent small-pox; but, on the contrary, among those where the traces were doubtful, three suffered from this form; there were also three cases of confluent small-pox, and who had not been vaccinated, and who now had small-pox for the first time. All these facts speak loudly in favour of vaccination.

In eight cases contagion was evident. The duration of the incubation was from twelve to fifteen days in four cases, which is somewhat different from the results of previous years, but which is conformable to those generally admitted. If sometimes you see cases in which the incubation seems very short, it is probably because these persons already had within them the variolous principle, before exposing themselves to any infection, (ces individus portaient, probablement, deja en eux le principe varioleux avant de s'exposer à un foyer de infection.) Suppose in fact that a person had been in contact with a variolous patient, or by some other means had been impregnated with variolous emanations, should be exposed to some subsequent contagion of the same

kind, and that the day after this second exposure he is attacked with a variolous eruption, could we say that this affection was developed after a day only of incubation?

A chill is a very common prodrome of this affection. It occurred twenty times in thirty-four. Pain in the loins was quite common; we observed it eighteen times. Cephalalgia sometimes occurred; and in ten cases there was vomiting. The prodromes lasted from two to five days. Sixteen times the predromes were of very short duration, and this occurred in the confluent cases; whilst in the discreet cases the prodromes were more or less long. It is an acknowledged fact, at least in small-pox, that the disease is most severe where the prodromes are most rapid. Out of six cases of confluent small-pox, all nearly terminating in death, in five the prodromes were very short. These statistics should be borne in mind by you, as they are of great importance in prognosis.

Among those who died, one very rapidly succumbed to a complication of double pneumonia with uterine hemorrhage. Another died at the sixth day of his entrance into the hospital; he had varioloid, accompanied with repeated epistaxis, and with hemorrhagic spots on the skin, which is one of the worst forms. A third died at the end of three days, of confluent small-pox very intense, with cerebral symptoms. He had been vaccinated. Finally, another, who had not been vaccinated, died on the eleventh day; this was a very bad case.

We had six cases of varicella, all which recovered. Thus, as I remarked above, the proportion of those attacked with variola, who had been vaccinated, to those who had not been, was very great. For, including one-half of the doubtful cases, we would have nearly, out of the whole number of those attacked with small-pox, one-half vaccinated. These facts are very important, serving as they do, with a mass of facts of the same nature, collected from all parts, to throw great light upon a question of the first importance, in respect to which medical opinion is so much divided. If variola rarely occurred, and that at distant periods, it would be a much less important question. Re-vaccination would then be considered as a mere matter of precaution, and not as absolutely necessary, as many physicians think.

If a first vaccination protected you with certainty from any attack of small-pox for a period of fifteen or twenty years, a period beyond which its efficacy would be null, it would be very easy to recur, at the end of that time, to a second vaccination; this would be a very natural measure, and one dictated by common sense. But the question should be as simple as it is here stated. As it has been proposed by the Academy of Medicine, it offers many difficulties to resolve. It is my duty in this place to make known my opinion. The facts which I have given you in the course of this lecture. though few in number, *are sufficient to show the utility of re-vaccination.*

How did it happen then that when this question was agitated at the Academy of Medicine, that a number of the members disputed the opinion that I have here given, and that the majority decided against the utility of re-vaccinations? The reasons for this conduct I believe to have been the following: It was believed that if the propriety of re-vaccination was acknowledged, that it would give rise to the idea in the public mind that primary vaccinations were inefficacious, and that the acknowledged necessity of a second vaccination with the object of preventing consecutive variola, would diminish, above all in the minds of the ignorant masses, the confidence in vaccine. Certainly, if it were proved that a second vaccination was a useless and insufficient preservative against an attack of secondary small-pox, there would be some reason in abstaining from spreading among the people ideas which could disturb their confidence; but innumerable facts depose against this conclusion. It is false, too, that re-vaccination condemns primitive vaccination; it only proves that this has not an absolute and unlimited efficacy, that its preservative powers become enfeebled in time, and that they must be renewed by a new vaccination. Besides, let us suppose that this false opinion reigned among the people, ought physicians to suffer themselves to be guided by an erroneous public notion, and not by their own conviction? What inconvenience is there in a vaccinated person undergoing the operation a second time? None! it occasions even no interruption to the daily habits of the person. If after several days the vaccine pustules are not developed, you have the satisfaction of knowing that the individual is for some years, safe from any attack of variola. If, on the contrary, the vaccine succeeds, we must conclude that an attack of small-pox might sooner or later have occurred, and that by this precaution the individual will for the future be preserved from it. Let us suppose now that an individual predisposed to secondary small-pox will not be re-vaccinated, and that he is attacked with the disease, how very different is the position of this person with one who has submitted to re-vaccination. One by taking an insignificant precaution will suffer from no inconvenience, whilst the other, supposing that he has only simple discreet variola, will be obliged to remain in bed for some days, and if it should be confluent, what danger will be not run. In regard then to this there can be no doubt; the inconveniences on one side, and the advantages on the other are too evident. There is besides a reason of morality and public interest which is strongly in favour of my opinion. A person who is re-vaccinated not only preserves himself against an attack of small-pox, but the security will extend to those who might have been exposed to the contagion, had that individual instead of being re-vaccinated, had an attack of small-pox. This is an argument, I conceive, of great weight in favour of re-vaccination. Besides, by this means we may rationally anticipate sooner or later to destroy variola altogether. This consummation will indeed be consoling, and worthy in every way of our art.

There are many individuals who believe that they have been vaccinated, who have not been; or who think that they have had small-pox, who have not had it; for such the advantages of re-vaccination are still more evident. Thus, whatever may be the case, whether a man is certain of having been vaccinated or not, or of having had small-pox or not, it will always be advantageous for him to resort to vaccination, more especially as it occasions, as I have said before, no inconvenience. Finally, we cannot expect from vaccination more than we obtain from small-pox itself, as a preservative. Now, variola does not invariably protect one against a second attack of small-pox, even of the confluent variety; what is there then so astonishing in the fact that vaccination does not preserve indefinitely from the same accident, and that at the end of a certain time, we must recur a second time to it. I think then that after these reflexions, *we should not hesitate an instant to recur to re-vaccination, as a means of the greatest utility, and that our authorities will not be long in convincing themselves of the necessity of ordering it as a general sanitary measure.*

Scarlatina.

The cases of scarlet fever that we have had in the course of the present year, and which amounted to eighteen, presented sometimes very severe symptoms. Scarlet fever is commonly graver and more dangerous than measles, especially when it attacks persons of somewhat advanced age. Convalescence in this disease exacts great care, if you wish to avoid severe accidents. Convalescents from scarlet fever should not be permitted to go out before fifteen or twenty days; without this precaution there will be risk of œdema of the limbs, and other consecutive symptoms, more or less serious.

Out of the number of cases of scarlet fever mentioned above, in eight there were pains in the lumbar regions, which is remarkable, for this is a symptom peculiar to variola, (?—Ed. M. E.) It was not certain, however, that they were actual lumbar pains, for scarlatina patients suffer ordinarily at the commencement with general pains in the limbs and back.

Measles.

All the cases of measles terminated favourably. We remarked in all of them the characteristic sputa, white, thick, round, and swimming in a semi-opaque fluid, resembling very much the sputa of phthisis; when lecturing on the subject, I called your attention to the differential signs, which are easy to appreciate. The presence of the sputa is often very happy for the differential diagnosis between measles and scarlatina. Sometimes, you know, rubeola occurs without any eruption, which induced the ancients to admit of a variety which they called morbilli sine morbillis. It is especially in cases of this kind that you have a very good means of diagnosis, by the characteristic sputa, for wherever you meet with it, you can with certainty diagnosticate measles, even in the absence of the eruption. The attention of practitioners should be particularly called to this point.

Erysipelas.

We had thirty-two cases of erysipelas, of which number six died, or about one-fifth. In this number are included those cases of erysipelas that occurred as complications of other diseases. Two supervened in course of severe typhoid fevers; one case complicated a pleuro-pneumonia; a third was developed after a surgical operation; this was one of those wandering erysipelases, such as we commonly see under such circumstances. It was more frequent in women than in men, which is due probably to the greater sensibility of the cutaneous system in the former.

Spontaneous erysipelas, that which is developed under the influence of internal causes, often attacks the face, and is thence propagated to the hairy scalp; this occurred in sixteen cases. This variety of erysipelas is always grave, and frequently mortal. In all the cases, where the erysipelas was limited to the face, which were eleven in number, the disease terminated happily. Erysipelas is not so mild a disease as many physicians wish you to believe, especially erysipelas of the face, with a disposition to extend to the head. In these cases you must employ very active treatment, such as local bleedings, and even general bleeding, when the force and age of the patient permit it, and according to the intensity of the general symptoms. Whilst spontaneous erysipelas is ordinarily developed on the face, traumatic erysipelas usually appears about the seat of injury, and from thence tends to extend. You must not believe that this species of erysipelas has no other cause but an injury; there is often individual predisposition, and the wound or surgical operation acts only as a determining cause. All erysipelases can, therefore, be reduced to one variety, with regard to their future cause.

Paris, May, 1843.

CASE OF HEMIPLEGIA, CONSEQUENT ON TYING THE COMMON CAROTID.

BY O. FAIRFAX, M. D.

To the Editor of the Medical Examiner.

Sir,—Observing in a late number of the Medical Examiner, an instance of hemiplegia, consequent on tying the common carotid, and believing it to be an unusual effect of the operation, and an additional and striking exemplification of the fact that opposite conditions of the brain as regards its supply of blood, may result in the production of some symptoms in common, I am induced to send you the following similar case.

On the 18th of July, 1842, in presence of Drs. Murphy, Powell and Richards, of this place, I applied a ligature to the left common carotid, an inch above the clavicle, and my patient became hemiplegiac, as regards the limbs of the right side, but the face was not affected. The hemiplegia may have occurred at the moment of tying the ligature, but was not remarked by the attendants until an hour or more after the operation. The patient, who was a middle aged lady, already much reduced by chronic disease of the lungs, remained faint and hemiplegiac to her death, which occurred after five days, apparently from exhaustion. Her mental faculties continued perfect to the last hour.

Alexandria, (D. C.) Aug. 31, 1843.

ON SULPHURETTED HYDROGEN GAS AS THE CAUSE OF MALARIOUS FEVERS.

Extract from a letter of Dr. J. L. Day, Colonial Physician, dated Monrovia, July 3, 1843, to a distinguished Professor of Natural Philosophy, in the College of a neighbouring State.

[Communicated by Professor DUNGLISON.]

"I cannot be too much obliged to you for the mark of your esteem in being at the pains to have copied for me the lengthy paper of Professor Daniell on the composition of the waters of this coast, &c. &c. He has scarcely left any room for one to make any reputation for himself on the track he has opened. He seems to have established conclusively in his own mind, that the insalubrity of this coast depends upon the excessive evolution of sulphuretted hydrogen, and adds: 'You have seen how constantly chlorine, [which he calls 'a certain remedy,'] destroys the gas.' 'Chlorine and sulphuretted hydrogen cannot exist together.' 'Plentiful fumigations of chlorine would therefore infallibly prevent,' &c. &c. And he alludes to the far-famed Niger expedition being fitted with means of constant chlorine fumigation;" and I may add, that when here we were shown this fumigating apparatus, by Captain Trotter, as a sort of life guard from the dreaded fever of this coast, and Professor Daniell's last words, after noticing this expedition, and the means of remedy adopted, are, 'We wait the result with anxiety.' And what has been the result? A most unexampled mortality, much greater than occurs in this settlement, where we are exposed on land to the miasm of the surrounding country,

and where we have no fumigation of chlorine. Scarce men enough were left alive in the steamers to carry them home, and one of them was so completely disabled from sickness and death, when far up the river, that it would not have been enabled to get down but for the timely assistance of Captain Becroft, who had been once or twice up the river in a steamer of his own. I have not time to give you any more particulars; but would ask, in conclusion, if Professor Daniell be now so sanguine that he has proposed 'a certain remedy.'"

BIBLIOGRAPHICAL NOTICES.

Address delivered before the American Society of Dental Surgeons, at the opening of its Fourth Annual Meeting; Baltimore, July 18th, 1843. By CHAPIN A. HARRIS, A. M., M. D., Doctor of Dental Surgery; Professor of Practical Dentistry in the Baltimore College of Dental Surgery; Member of the Medico-Chirurgical Faculty of Maryland, etc. etc. Baltimore: 1843. 8vo. pp. 22.

Our readers may readily conceive the pleasure we experience, not only in reading, but in noticing a production like this. At the present moment, when the "dog star rages," in "far and fierce delight," undisturbed by any visiter from the realms of Eolus to divide his sway, we feel but too often oppressed by the dull monotony of the beaten track of our severer duties, and as often are tempted to prove recreant and seek for repose and variety in the more fascinating paths of the literature of our science. Dr. HARRIS's brochure arrived most seasonably, and in the same spirit which induced us to welcome its appearance, we will attempt a feeble delineation to our readers of the gratification and instruction we have derived from its perusal.

Many of our readers may perhaps be unaware that once in every year, the "American Society of Dental Surgeons,"—"the only regularly organized and extensive association in the world," of the kind, meet. "The welcome return of the Anniversary meeting, the fourth of this Association," is the occasion of the present effusion; when,

"From widely separated sections of the country, from our various field of labour, usefulness and *profit*, with spared lives, and obligations a thousand-fold increased, of gratitude to the great Supreme Preserver, we meet to promote the great cause of humanity, by strengthening each others' hands and *accomplishing* ourselves more perfectly in an art and science so intimately connected with the functions of health in the human system, with the enjoyment of life and the perfection of beauty, as are the operations of Dental Surgery in ameliorating the sufferings and increasing the happiness of man."

"These annual re-unions of members of a time-honoured(!) profession," at a mighty shrine, "before which [they] are to renew the truthful vows of deep devotion to the great cause of human good," Dr. H. regards as both pleasant and grand, an opinion in which we should cordially agree, were we fortunate enough to be one of the train-band. A description of the results of this "annual action," embodies so much that is new and startling in physiological diction, that we are induced to transcribe it.

"In this annual action there is analogy to the arterial and venous circulation of the blood of the human system; thrown from the *central ganglion*, it rushes through the canals of the arteries, then into the veins, perambulating the extremities of the body, taking in the needful supply of oxygen from contact with the air in the lungs or near the surfaces—then returning to leave its richness in the *great treasury of life*, to deposit all its acquired energy at the *central seat of vitality*; so, at stated periods, the members of this Society come from their posts of observation to report progress at the centre, to throw their discoveries, improvements, the results of industry, research and experience into the common fund—the great joint stock of dental knowledge."

A hypercritical spirit might suggest some slight tendency to rhetorical exaggeration, but there is a business-like air about the style, which, to our mind, entirely redeems it from any such imputation.

"The great and sublime spirit of association" is urged in an honest and impassioned strain, which could not have failed to convince its auditory. We regret that our limits do not permit us to present, in extenso, the argument. We have room only to cull one or two of the choicest *morceaux*.

"The necessity of associated effort and influence becomes apparent, and the American Society of Dental Surgeons, kept up in peace and concert from generation to generation, shall become *like the Persian band of immortals*, a living member stepping in to sustain the station of each one who may fall in the exercise of his profession, and ripe with all the virtues of his calling, and an extensive usefulness among his fellow men."

There is much brilliant imagery in the few following lines.

"Already have the muses smiled from Helicon on dental toil, and the goddess Hygeia, blushed with a more rosy beauty at the song of enchantment which celebrated the achievements of the art, and its connection both with health and loveliness; and other poets shall arise, like Darwin, Marmont and Brown, to crown the pale brow of 'star-eyed science' with bays of poesy!"

The sound, good sense, and practical philosophy of the annexed remarks will be generally acknowledged. A certain occasional homeliness of phraseology, judiciously tempers its rather aromatic tendency.

"One such friendly visit oftentimes puts out a flame of rising anger that might have illuminated a wide district of country, and in its lurid glare shown only the dark and diseased shadows of the human heart—the black vortices of shame, revenge, and every ungenerous, unlovely passion which the tempter of man ever planted in the deserts of the soul. A man never shows his weakest and darkest points of character, until he gets into a bitter and most implacable controversy with another; and then, when he is pouring out gall and wormwood upon the naked head of his antagonist, and, as he supposes, *using him up*, root and branch, before he is aware, he finds the whole public in possession of the fact, destructive for ever of his own fame and reputation, that he is a quarrelsome, and unfriendly, and revengeful man; and he finds out too late that his great controversy has been against his own character, and that he has, indeed, come off most irretrievably triumphant! A little patience, forbearance and inves-

tigation will set most matters at rest before the winds howl from the wilderness, and the turbid waves of passion begin to roll."

It is with heartfelt regret that we are obliged to part with our author, a regret which our readers must no doubt share with us. Before doing so we must indulge in one more quotation. This organization, whose destinies, we are told, "Time only can unravel," has in anticipation of future times, when, in those great revolutions of the globe which geology teaches us occur, aristocracy shall be in the ascendant in this hemisphere, adopted a coat of arms. This insignium, which would be a godsend to the College of Heralds—"is a polyandrian column, based upon a rock, surmounted by the lamp of science, throwing its rays above and around, encircled by the cognomen of the Association." Our author indulges the hope of seeing three such pillars arising from different empires of the globe.

The italics here, as elsewhere, are our own.

"Against three such columns, so planted on the rock of truth, and so illuminated by the 'star-eyed' radiations of science, the waves of error might dash in anger, but they would dash in vain. *In storm or calm, in 'gloom or glory,' those same changeless lights would shine, those same polyandrian columns stand unshaken, and those same adamantine rocks beat back the affled surges, still bearing unmoved those glory-tipped pillars, as light-houses of scientific discovery, and as monuments of associated intellectual energy, devoted to the best interests of mankind.*"

Physiology Vindicated, in a Critique on Liebig's Animal Chemistry. By CHARLES CALDWELL, M. D., Jeffersonville, Ia. 1843. 8vo. pp. 95.

The advance of Animal Chemistry within the past few years, and its connection with Physiology, has alarmed Dr. Caldwell, and as one of the "sentinels" of science, he considered it incumbent upon himself, not only to announce the approach of danger, but also to assume the character of a "guardian," "and even of a combatant, and protect from unwarrantable inroads the branch of science committed to his superintendence," (Preface p. v.) In this threefold character "of three gentlemen at once," Dr. Caldwell appears before us to oppose the "ambition and rapaciousnsss," as well as the "aggressions," supposed or real, of Organic Chemistry, which under the command of its Chief, Professor Liebig, indicates, he thinks, "a determination to usurp dominion over the whole philosophy of living organized matter." With all the ability of an old and skilful tactitian and accomplished warrior, Professor Caldwell aims a decisive blow at the leader of this predatory band, whom, he thinks, "without any inordinate extravagance of hyperbole" (!) may be likened to Attila, the "CURSE OF GOD," "beneath the hoofs of whose war [hobby!] horse" the verdure of the physiological parterre committed to the care of the Louisville Professor is "blighted." "The interests of the *philosophy of Medicine*," which our author has been "deputed to teach, being thus endangered by the celebrated German Professor and his followers," he thought that it did not comport with his "sense of either moral or official duty, to remain longer inactive.' The doctrine which "metamorphoses man with all his attributes, corporeal and mental, into a chemical product," Dr. Caldwell considers as "not only physically groundless, but morally pernicious." From this chemical creed thus "groundless, degrading, and pernicious," and menacing religion, morality and philosophy, has arisen the "unspeakable mischiefs and miseries of humoralism."

These are themes for thought; but we touch them not. We have thus given the scope and tendency of this publication, which we have perused with patience, and closed with a distressing impression of the amount of labour the author has bestowed on his composition. He tells us (Preface, p. vi.) that finding the character of a controversialist unprofitable and thankless from a long experience, he "sickened at the prospect of a new collision;" but a stern sense of duty overcame all inferior considerations, and he boldly buckled on his armour, somewhat the worse for wear, and launched into the thickest of the combat. He regrets his insufficient preparation for the attack, but relying, doubtless, on his name and well-tried abilities, he sallies forth; but like other whilome veterans, with inadequate notions of the nature of the territory he is about to invade, an erroneous idea of the strength of the enemy, in utter ignorance of the system of tactics they employ, and with a pretty certain prospect of defeat, should any of the tyros of the opposite cause have leisure for a little pastime.

In the whole of the ninety-five pages which it was our misfortune to wade through, we have not found a single plausible argument, or a solitary fact opposed to the reasoning or the statements of Liebig. If the Professor of Gissen has erred in theory, or been premature in many of his conclusions, not a single proof of his faults could be adduced from the pedantic slip-shop of this pamphlet. When a man does a dull thing in a quiet way, we are inclined to pardon or overlook it; but we consider the inconcievable stupidity that gratuitously thrusts forth its crude, turgid and operose ignorance, in an emphatic and arrogant tone, as worthy of castigation, as of the irresistible ridicule it invariably excites. On this occasion we do not know if we were more provoked at the conceit, bad taste, and perversity of the manifold affectations of the author, pained by the perpetual tone of toilsome effort, and rhetorical exaggeration pervading the book, or startled at the wretched twaddle which fills page after page.

[MORBID CONDITION OF THE BLOOD IN GLANDERS.

M. Renault made a number of experiments to ascertain whether the blood of an animal labouring under glanders could communicate the disease to a healthy animal. A horse was inoculated with pus taken from a man labouring under glanders; the horse was soon after seized with the disease. Before killing it a quantity of blood (ten ounces) was taken from the jugular vein, and injected into the veins of a healthy horse. At the end of three days the horse was seized with acute glanders; and blood drawn from it, and injected into the veins of another healthy and vigorous horse, in its turn produced glanders also in three days. From these and other experiments, M. Renault concludes that the blood is essentially diseased in this fearful malady.—*Prov. Med. Journ.*

RETROSPECT OF THE MEDICAL SCIENCES.

SUCCESSFUL CASE OF TRANSFUSION OF BLOOD.

BY J. C. PRICHARD, M. D., F.R.S., M.R.I.A.

The patient alluded to is a mercantile man, who had been in the habit of travelling in pursuit of his commercial business. He had been a strong, active man, and had lived as persons of his vocation generally do, but more temperately than many. When I saw him first, on the 11th of January, 1834, he had been upwards of two years an invalid, and had been under the care of Mr. Henry Clark, one of the surgeons of the Bristol Infirmary—a medical practitioner of great skill in this city. For some short time he had also been visited by Dr. Riley, and by these gentlemen I was called to see the patient. His early complaints had been of dyspeptic symptoms. These were followed by emaciation and loss of strength. His actual state was that of extreme inanition; his pulse was feeble, jerking, very compressible, the calibre of the artery apparently not filled; he had palpitation of the heart, increased by the slightest exertion, while any effort brought on an approach to syncope. No disease was discoverable by the sounds of the heart or respiratory organs, though some suspicion was entertained of slight dilatation.

The state of the urine alone threw some light on the nature of the disease. It had long deposited a very copious sediment, of a whitish colour, slightly tinged with purple, which was redissolved by dilution, with the addition of an alkali. It appeared to consist of lithates, with some chyle; and it was thought probable by the medical gentleman who had previously attended the patient, and by myself at our first meeting, that an exhausted and exsanguineous state, brought on by a long continued draining of the system, constituted the principal disease, or at least that which first required attention. Under these circumstances, it was determined to try a restorative and repletive plan. A nourishing diet was ordered, with malt liquor and some other stimulants. His stomach would receive but little, and at length rejected food. His exhaustion increased to that degree that immediate fatal syncope was threatened. We determined, the patient being obviously *in extremis*, to try the effect of transfusion, and as patients under cholera had borne the injection of large quantities of fluid, there seemed to be no danger in injecting a considerable quantity of blood. Sixteen ounces were taken from the veins of a hale young man, a servant of the patient, and were injected most skilfully by Mr. Clark. The patient was immediately revived and roused. On the following day he appeared much stronger, but complained of some sense of fulness about his head, and a few drops of blood escaped several times from his nostrils. This subsided; his appetite became good, and he ate plentiful meals of meat, and drank porter, &c. He gradually recovered his strength. The urine improved under the use of alkalies with lime water, and these were nearly all the remedies used except a few bottles of an effervescing solution of citrate of iron. After two or three months he left his chamber, and then his house, and I understand he is now travelling on commercial business.

I think it may be inferred from the facts of this case that many lives may be saved by injecting good blood into the veins of exhausted patients, and, perhaps, this measure may become hereafter as important a remedial measure as the detraction of blood has been since the time of Hippocrates.—*Prov. Med. Journ.*

STATISTICS OF EPILEPSY.

By M. Leuret, of the Bicêtre, Paris.

The following facts are taken from the first part of an interesting paper on this subject, by M. Leuret:

Among 106 cases of epileptic patients, 24, or nearly one-fourth, began to be affected between the 10th and 14th year of their age; 18 were first attacked between their 15th and 19th year, and 16 between their 20th and 24th year; 58 patients, consequently, of the whole number were first attacked between their 14th and 24th years. Of the 106 patients, the disease was ascertained to have existed either in the father or mother in 6 instances only. And in no more than 8 cases was it found that the parents had died of any disease of the brain; there was insanity thrice; apoplexy twice; paralysis once; suicide once; meningocephalitis once. Of the 106 patients, 30 had been drunkards; 24 masturbators; and 15 addicted to women. The actual or presumed cause of the first attack was ascribed to terror, in fifteen cases; to Onanism, in twelve; to drunkenness, in six; to anger, in two; to distress, in two; to falls, in two; to libertinage, in one; &c. 30 of the 106 patients had an attack very regularly once a-fortnight; 17 suffered attacks once a-month; 13 once a-week; 9 every three or four days; 4 almost every day; 2 every day; 1 every two months; 3 every three months; and 24 at very irregular intervals. In 35, the attacks supervened in the night especially, in 29, they were as frequent in the day as in the night; in 12, they frequently occurred in the day; in 8, they occurred during the day only; in 8, in the night only; in 3 in the morning only; in 4 others, generally in the morning; and in 1, in the evening only.

Ibid, from Archives Générales de Medecine.

THE DIAGNOSIS OF UTERINE DISEASES.

In ascertaining the diseases of the uterus, we have it in our power to avail ourselves of both the classes of symptoms of which I have spoken; or, in other words, we may form our judgment of its morbid conditions, both by studying the vital functional derangements, local, sympathetic, and constitutional, that may be present; and by informing ourselves, by physical diagnosis, of the exact existing state or states of the organ itself. Each of these classes of symptoms may afford us most important information, and in all cases where both can be had recourse to, our diagnosis will be greatly more certain under their combined evidence, than if the data furnished by either were alone trusted to. Of the two (if we are to make comparisons between them) the physical symptoms are assuredly, in most cases, by far the most valuable and trustworthy, and yet in the common course of medical practice, the testimony which they are capable of affording is but too frequently neglected and overlooked, and the functional and much less faithful class of symptoms alone relied upon, as well in forming the diagnosis as in directing the measures of treatment.

Thus, if we attempt to analyse the mode in which

the medical practitioner usually endeavours, in any suspected case of uterine disease, to detect the presence and character, or ascertain the absence of such an affection, we will find, I believe, that he generally proceeds by taking into consideration some or all of the following sources and varieties of information:—

First, The local and functional state of the uterus, so far as it is indicated by the quantity, character, periodicity, &c., of the menstrual and mucuous secretion of the organ; by the occurrence or non-occurrence of morbid uterine or vaginal discharges—as of blood, serous fluid, pus, &c.; by the existence or not of morbid sensations in the region of the uterus—such as different modifications of pain, intermittent or continuous, feelings of heat, weight, tension, bearing down, &c.; and, if the patient be married, by the reproductive powers of the organ—as shown by sterility, by the recurrence of abortions, &c.

Secondly, The presence or absence of various morbid affections of the neighbouring viscera, particularly of the rectum and bladder, and of branches of the vessels and nerves passing through the pelvis, as indicative either of their sympathetic irritation or of their mechanical compression by the enlarged or displaced uterus.

Thirdly, The existence or non-existence of secondary local neuralgic pains in the mammæ, along the lower extremities, in the loins, and at points along the course of the spinal column, in the parietes of the thorax or abdomen on one or other side (and especially under the left breast, and under the margin of the ribs,) along the colon, &c., increased in their intensity by any causes of increased action in the uterus itself, by the erect posture, by menstruation, &c.

Fourthly, The state of the general constitution of the patient, as marked by various degrees of deviation from the standard of health, and especially by the supervention of nervous, hysterical, dyspeptic, chlorotic, or cachectic symptoms.

The several preceding series of morbid phenomena consist of derangements in the vital actions of the uterus, or of other parts and organs secondarily affected, or of the constitution at large, and so far strictly belong to the class of functional or dynamic symptoms only. Up to a late date in the history of uterine diagnosis, most practitioners remained, and some still remain, satisfied with the degree of knowledge which is afforded by the above sources of information. No one, however, who is practically acquainted with the disease of the uterus can have any hesitation in declaring that the symptoms derivable from these sources, are utterly inadequate, in the general routine of such cases, for the purposes of correct diagnosis, and are constantly liable to lead into fallacy and error when their individual evidence is alone trusted to. In making this observation, I do mean to allege that these classes of symptoms are not sufficient to give us the power in most, though not in all instances, of detecting the actual presence of uterine disease. They are perfectly deficient, however, in this other point, that, by their single unassisted aid, we cannot ascertain what the exact character and nature of the existing disease is, nor, consequently, what may be the proper line of treatment requisite for its alleviation or removal. They may generally, in other words, enable us to decide that the uterus is the seat of some morbid condition, but are not adequate to inform us what that morbid condition really is. They may show that the organ is affected, without showing us how it is affected.

Prof. Simpson, in Lond. and Ed. Month. Journ.

CONNECTION OF CHOREA WITH RHEUMATISM—PERICARDIAL IRRITATION.

The connection of chorea with rheumatism is not the least interesting feature in its history. It often occurs in the rheumatic diathesis, as I believe is indicated by the frequent coexistence of chronic valvular disease of the heart with it, and it frequently comes on after attacks of rheumatic fever. In the case of a lad, fourteen years of age, who was in the hospital two years ago, the first attack of chorea came on four months after one of rheumatic fever; a year after this he had a second attack of chorea; some time afterwards he had another attack of rheumatic fever, and in three months another one of chorea. The records of practical medicine contain abundant evidence to warrant the assertion that *the rheumatic state of constitution is favourable to the developement of chorea.*

"We must, however, distinguish between the true chorea occurring in rheumatic habits and those chorea-like movement which have lately attracted the attention of physicians as symptomatic of the disease of the pericardium or heart. These latter are examples of reflex movement, excited by the stimulus of irritation conveyed from the heart to the nervous centres, and thence reflected to the muscles of the extremities and the face, causing in the latter a peculiar sardonic expression, which to the practised eye is very characteristic of pericardial irritation."

Dr. Todd's Clinical Lecture in Med. Gaz.

NEW TEST FOR ARSENIC.

The one-hundred-and-forty-fourth part of a grain of arsenious acid was mixed with two fluid drachms of milk. The mixture was boiled with a few drops of muriatic acid, and a slip of copper was introduced. In less than a minute the metal was coated with a grey film of metallic arsenic. Several pieces were thus coated; they were washed in water, dried in the heated current of air over a spirit lamp-flame, and introduced into a small reduction tube. On applying a gentle heat to the copper, octohedral crystals were obtained; visible to the eye in the light of the sun, but plainly distinguishable with a lens of low power. The crystals dissolved in water gave the usual reactions with the ammonio-nitrate of silver and sulphuretted hydrogen gas. In a second experiment, the same quantity of arsenic was mixed with two drachms of porter; in a third, a like quantity with two drachms of gruel, and the copper test was applied with similar satisfactory results. Each experiment was completed in about five minutes. Brandy, containing a poisonous impregnation of arsenic, was then tested; and the arsenic readily separated. A few drops taken from a bottle of port wine, containing arsenic, and which had nearly caused the death of three persons about four years ago, were next submitted to the test, and the metal readily obtained. In organic solids the results were equally striking: a few grains of a cake containing arsenic, which had been used in an attempt to poison, were boiled in a small quantity of distilled water, and muriatic acid and copper added, when metallic arsenic was immediately precipitated. The contents of the stomach of a person who was poisoned by arsenic in February, 1834, which had been loosely exposed, and allowed to become decomposed during a period of upwards of nine years, were next examined. A few drops of the thick turbid liquid were placed in a tube and boiled with dilute muriatic acid and water; the copper introduced was covered with a bright

layer of metallic arsenic. The contents of three other stomachs taken from persons poisoned by arsenic in 1835, 1838, and 1840, gave precisely similar results. In the last case, the whole of the contents, with the food at the time contained in the organ, had been evaporated to a dry solid mass; a few grains of this were sufficient to furnish a clear demonstration of the presence of arsenic by the aid of the test. In the conversion of the metal to arsenious acid, it will at once suggest itself that if octahedral crystals should not be obtained by heating one portion of copper, several slips should be introduced together or separately. In all these cases arsenic will have been discovered by the application of Marsh's test, or sulphuretted hydrogen gas; but the process would have occupied a much longer time, and with regard to Marsh's test the metallic arsenic could not have been so speedily converted to arsenious acid in a form convenient for the identification of its properties.

Another useful application of the copper test may be made in the following way. If the arsenic have been thrown down from an organic liquid in the form of impure sesquisulphuret, this may be dried and deflagrated with nitre, or decomposed by nitro-muriatic acid, whereby arseniate of potash or arsenic acid will result, and the organic matter will be entirely decomposed. In the case of deflagration by nitre, the surplus nitric acid should be expelled by sulphuric acid, and the arseniate dissolved out of the residue; or if nitro-muriatic acid be used, the liquid may be evaporated to dryness. On boiling either of these products with copper and muriatic acid, the metallic arsenic will be readily procured.—*Mr. Taylor, in British and Foreign Review.*

EMPLASTRUM CERATI SAPONIS.

Although this plaster has for many years been extensively sold, spread on linen or calico, we have not seen any published formula for it, and the soap cerate being too soft for use as a plaster, several correspondents have inquired how they should proceed when emplastrum cerati saponis is ordered in a prescription.

The addition of one part of ceratum saponis to two parts of emplastrum plumbi, forms a plaster which, on an emergeney might be used in such a case, the article in question not being a preparation of the Pharmacopœia. But the most legitimate mode of reducing the cerate to the form of a plaster is to continue the evaporation until all the vinegar is expelled. This method is adopted at the Army Laboratory, where the plaster is kept, not only spread as usual, but also in rolls like other plasters.

The following is the formula used at the Army Laboratory:—

Common vinegar (No. 21) old measure.	8 gallons,
White Castile soap,	16lb.
Yellow wax,	20lb.
Olive oil,	32lb.
Litharge,	32lb.

Boil the litharge with the vinegar almost to dryness; remove from the fire and add the soap, previously scraped or cut; replace on the fire, taking care to avoid empyreuma; then add the wax and oil, melted and strained, and continue the evaporation, stirring constantly until the whole of the vinegar is expelled. The time required for completing the above quantity is three or four days.

The original recipe directed eight gallons of the residuum of distilled vinegar to be used instead of twenty-four gallons of common vinegar. The plaster thus prepared has a dark-brown colour; but when the vinegar is used and the plaster has been carefully made, its colour is not much darker than that of adhesive plaster. The emplastrum cerati saponis extensum, as usually sold, is coloured artificially with burnt sugar.—*Pharmaceutical Journal.*

CASE IN WHICH A FOREIGN BODY WAS LODGED IN THE RIGHT BRONCHUS.

BY SIR BENJAMIN B. C. BRODIE.

The author's object in this paper was to describe a case in which a half-sovereign was lodged in the right bronchus of the patient for a period of thirty days, and in which certain novel measures adopted for its removal proved successful. It was on the 3d of April, while the patient, Mr. B., was amusing some children, that the coin which he had in his mouth accidentally slipped into the trachea. The symptoms which succeeded were principally occasional severe fits of coughing, and a sense of pain referred to a part of the chest corresponding to the situation of the right bronchus. No particular sounds were detected by the use of the stethoscope. The patient was able to pursue his usual avocations, and made two journies into the country. On the 19th of April, having placed himself in the prone position, with the sternum resting on a chair, and his head and neck inclined downwards, the patient had a distinct perception of a loose body slipping forwards along the trachea; a violent convulsive cough ensued, and, on resuming the erect posture, he again had the sensation of a loose body moving in the trachea towards the chest. An apparatus of the following kind was now constructed. A platform on which the patient could lie prone, was made to move on a hinge in the centre; so that one end of it being elevated the other was equally depressed. On the 25th April the patient was laid on this apparatus, with his shoulders and body fixed by means of a belt, and his head was lowered to an angle of nearly ninety degrees with the horizon. His back was then struck several times with the hand, but violent fits of choking were brought on each time, and it was not deemed prudent to continue the experiments. On the 27th it was agreed in consultation to make an opening in the trachea, between the thyroid gland and the sternum. In proposing this, the object was twofold: 1st, that an attempt might be made to extricate the coin by the forceps; 2d, that if relief could not be obtained in this manner, the artificial opening might answer the purpose of a safety-valve, and the experiment of inverting the body on the platform be repeated without the risk of causing suffocation. The operation having been performed, several attempts to extricate the coin were made, but without success; and, on each introduction of the forceps, paroxysms of convulsive coughing of such a violent kind were brought on, that it was plain that the attempts could not be persevered in without danger to life. On the 2d of May, a renewal of those trials was followed by the same results. On the 13th, the wound in the trachea having been kept from closing by the occasional introduction of a probe, the patient was placed on the moveable platform as described before; his back was then struck by the hand; two or three efforts to cough followed, and presently the patient felt the coin quit the chest, striking almost immediately afterwards against the

incisor teeth of the upper jaw, and then dropping out of the mouth. No spasm of the muscles of the glottis took place; a small quantity of blood was ejected at the same time, apparently coming from the granulations of the external wound. From this date the patient proceeded rapidly to get well.

The author concluded by making observations on the following heads:—1st, on the influence of the size, weight, and form of a foreign body introduced into the windpipe, in modifying the symptoms; 2d, he referred to experiments which showed that a heavy body, like the coin in the present case, was most likely to drop into the right bronchus; 3d, he adverted to the want of success attending the use of the stethoscope in this and in some other cases of the same kind; 4th, he pointed out the reasons on which he had founded his opinion, that the artificial opening made in the trachea would prevent spasm in the glottis, and thereby give greater chance of success to the experiment of inverting the patient's body on the moveable platform; lastly, he dwelt on the difficulties and dangers attending the use of the forceps, when a weighty body is lodged deeply in one of the bronchi, as was the case in his patient.—*Trans. Royal Med. & Chirurg. Soc. from Lond. Med. Gaz.*

INFLUENCE OF RICKETS UPON THE GROWTH OF THE SKULL.

BY ALEXANDER SHAW, M.D.
Surgeon to the Middlesex Hospital.

This paper was the sequel of one by the same author, printed in the 17th vol. of the Transactions of the Royal Medical and Chirurgical Society. The object of the former publication was, in the first place, to prove that, besides causing softening and distortion of the osseous system, rickets has the effect of arresting the process of growth; and secondly, to show that, owing to this interruption, the proportions of the figure peculiar to the adult are not perfectly attained by persons affected with the disease, but continue to be more or less those of the child. The figure of the child is characterised by the head, trunk, and upper extremities being of large dimensions compared with the pelvis and lower extremities, while that of the adult has the former parts relatively small, and the pelvis and legs large and powerful. In persons deformed from rickets, the whole figure is stunted; but the head, trunk, and upper extremities together, when compared with the natural adult dimensions, are only defective to a slight degree, (one-thirteenth,) while the pelvis and lower extremities are defective to a great degree, (one-third.) This difference the author accounted for by suposing that, as the disease stops the growth, it interrupts at the same time the change then in progress of being produced in the relative proportions of the figure; and so causes the patient, when arrived at adolescence, to exhibit traces of the configuration of the child. Having referred to the importance of this view in relation to the size of the pelvis in child-bearing women deformed from rickets, and stated that by measuring numerous specimens he had ascertained that the defect of growth in this part amounts, on an average, to nearly a quarter of the natural size, he proceeded to apply the same principle to the explanation of a peculiarity in the form of the head which he had observed as a general character in ricketty persons. This peculiarity consists in a disproportion between the size of the cranium and of the face. Between infancy and adolescence, a change in the relative proportions, analogous to that which occurs in the figure generally, takes place in the skull. Near birth, its form is characterised by the cranium being of a large bulk compared with the face: while at adolescence the contrast is greatly diminished, owing to the face having become much bulkier in comparison with the cranium than it had originally been. The author had remarked, and confirmed his observations by numerous measurements, that the skull, in ricketty persons, does not attain the proper adult proportions; but, on the contrary, the cranium appears remarkably large compared with the face, just as during childhood. Thus, taking the dimensions of the face as the limit of comparison, he found that in the skull of the infant the size of the cranium is as 8 to 1; in the adult as 6 to 1; and in the ricketty person (although beneath the standard size) as 7 to 1. He explained this disproportion by supposing that, as rickets arrests the growth, it interrupts, at the same time, the change occurring in the relative proportions of the skull between infancy and adolescence; and thus gives rise to the childlike character of the proportions. The proposition was illustrated by showing the contrary effects which an increased activity of the growth produces. In the figure generally, when the growth has been preternaturally active, as in tall persons, the effect of the unequal rate of developement in the two divisions of the frame is shown by the lower extremities acquiring an undue length compared with the trunk; so, in the head, the face becomes disproportionately larger compared with the cranium: thus by measuring the skull of the giant preserved in the museum of the College of Surgeons, the author found that the dimensions of the cranium (although above the standard size) are, to those of the face, only in the proportion of 5 to 1 in this skull. Having next shown that the orbits always preserve a uniform size, whatever be the dimensions of the face, in skulls of different proportions, and accounted for this fact by referring to the anatomical relation of the frontal and maxillary sinuses to these cavities, and showing that the two sinuses vary in capacity according to the rate of growth, he passed to the consideration of the growth of the maxillary bones. After dwelling on the difference in the mode of formation of the teeth as compared with the jaw bones, and the importance of an exact relation being preserved between the development of both parts, and referring to the observation of Hunter regarding the different rates of growth in the anterior and posterior divisions of the maxillary bones, he concluded by showing that, as rickets has the effect of interrupting the growth of the jaw bones, it deranges also the precess of evolution of the teeth. *Lond. Med. Gaz.*

MEDICINAL USE OF SAFFRON.

In several cases of obstinate chlorosis, that had not yielded to preparations of iron, in one case of puerperal fever, in which digitalis and bleeding had failed, and in two cases of chronic artero-phlebitis, Dr. Morgante, of Verona, reports that he has employed saffron with the greatest success, commencing with doses, in the form of pills, amounting to sixteen grains in the twenty-four hours, increasing the doses until the quantity is doubled. As to the manner in which the medicine acts—it is reported to be particularly effective in cases of increased action of the capillary vessels, and analogous in its effects to the more active preparations of iron.—*Ibid, from Mem. della Med. Con.*

DR. PERCY ON DIABETES MELLITUS.

1. Although the liquid of the stomach is capable of inducing the conversion of starch into sugar by digestion at a suitable temperature, yet we do not derive satisfactory and demonstrative evidence that this conversion takes place in a sensible degree in the stomach in the condition of health, and under ordinary circumstances.

2. As the formation of dextrine is the first step in the conversion of starch into sugar, it is required to ascertain whether dextrine may not be the ordinary product of the digestion of amylaceous matter, in the condition of health, and whether it may not be directly absorbed.

3. In diabetes mellitus sugar is found in the stomach, the intestines, the blood, and some other secretions.

4. In this disease, also, sugar is reported to be found in the stomach, even after the exclusion of all vegetable matter from the food. On this point further observations are desirable.

5. It is asserted that the quantity of sugar in the urine, *cæteris paribus*, varies directly with the quantity of amylaceous matters in the food. On this point, also, future observations may throw much light.

6. Sugar is certainly formed in the stomach in diabetes.

7. It is not clearly ascertained whether previously assimilated matter may not be absorbed, and be capable of conversion, in a partial degree at least, into saccharine matter.

8. The disease may exist independently of any appreciable disorganization of structure whatever.

9. Enlarged mesenteric glands, and the deposition of tubercular matter in the lungs, are, perhaps, the most frequent structural changes in diabetes. Enlargement, and a flaccid condition of the kidneys, cannot be regarded as indicating alteration of structure.

10. The kidneys appear simply to eliminate the sugar from the blood.

11. Our knowledge of the state of the blood and the secretions in diabetes is yet very imperfect, and has hitherto shed no light upon the pathology of the disease.

12. Disturbance or suppression of the function of the skin almost constantly exists.

13. The salivary secretion is generally much diminished, and has an acid reaction; the reaction of saliva in health being feebly alkaline.

14. A saccharine state of the urine may exist without the actual symptoms of diabetes.

15. Sugar, according to Dr. Prout, is not unfrequently present in the urine of gouty and dyspeptic persons; and, so far as the experience of that distinguished physician has hitherto extended, invariably exists in the urine when the system is affected with carbuncle or malignant boils.

16. Thirst constantly occurs in connection with confirmed diabetes.

17. The appetite is sometimes inordinate, at other times capricious and much diminished.—*Lond. Med. Gazette.*

AGENCIES INFLUENCING THE CIRCULATION AND CONDITION OF THE BLOOD IN REPTILES.

The researches of Gluge on the circulation in frogs have established the following facts:—On the sudden immersion of the feet of a frog in hot water the circulation is at once arrested and the blood coagulated; but the progress of the blood is soon re-established in the toes, and gradually in the other parts of the foot. The circulation (in frogs) is kept up for about twenty-five hours after the destruction of the brain and spinal cord. After the section of the crural plexus the same process is maintained for upwards of six days in the paralysed extremity, and it lasts ten days when only the spinal cord is cut at some point between the heart and the lower extremities. A considerable loss of blood greatly disturbs the circulatory process, paralyses the heart's action, and quickly destroys nervous excitability. The elliptical globules in the blood also diminish greatly in number, and are replaced by spherical globules. On suppressing the transpiration, as by varnishing the surface of the body, the blood remains liquid, and the cellular tissue and serous membranes become filled with fluid. When the respiration as well as the transpiration is suppressed, as in the case of frogs plunged into oil, the circulation is still kept up for two days.

A frog was inoculated with the blood of a man attacked with farcy; in three other frogs shreds from the stomach of a putrefying corpse were inserted beneath the skin; and under the skin of a fifth reptile a portion of decomposing muscle was placed. Paralysis of the heart and interruption of respiration ensued, with an altered state of the blood and exudation of it through the tissues,—in fact, true scurvy. No immediate effect was perceptible on the nervous system, but this soon became secondarily affected consequently on the alteration of the fluids.—*Lancet, from Schmidt's Jahrbuch.*, vol. xxxvi.

DIAGNOSIS OF PARAPLEGIA.

When paraplegia originates in disease of the spinal cord itself, retention of urine or irritability of the bladder often announces the approach of the disease long before the loss of power in the limbs becomes evident; whereas, in all those cases in which the paralysis creeps from the extremities along the nerves towards the spinal marrow, the bladder is affected only at a late period of the disease.—*Dr. Graves' System of Clinical Surgery.*

A Russian chemist has found out a method of ensuring a supply of milk extemporaneously. He evaporates newly-drawn milk at a gentle heat till it is converted into a fine powder, which is kept in closely stopped bottles, and affords good milk on being mixed with water, even after a considerable lapse of time.—*Lond. Lancet.*

VOYAGE UP THE MIDITERRANEAN IN THE TREATMENT OF PHTHISIS.

Statistical facts show that pulmonary complaints are more fatal amongst our troops serving at home than in the Mediterranean; and all the circumstances, independent of climate, so far as I am acquainted with them, affecting the question appear to be in favour of the troops serving at home, especially the cavalry; I am not only not able to adopt the opinion referred to, that the climate of the Mediterranean is more productive of disease of the chest than our own climate, but am obliged to fall back on the old and hitherto generally received opinion of an opposite nature.—*Dr. Davy.*

OXALIC ACID.

Mr. Orfila states that "the urine of dogs, subjected to the action of oxalic acid diluted with water, ordinarily deposits insoluble oxalate of lime, which is not the case with that of the same animals in a healthy state, unless they have eaten sorrel."—*Prov. Med. Journ.*

CAUSE OF BRUIT DE SOUFFLET IN CASES OF ANÆMIA.

According to M. Andral, the causes capable of giving rise to the anæmial bruit are reducible to the following:—

First, when the globules have diminished sufficiently to be below the cipher 80, the bruit de soufflet exists in the arteries in a constant manner. I have never found a single exception to this law.

Second, when the globules have remained above the cipher of 80, the bruit de soufflet can again show itself, but it is no longer constant; we continue to hear it often enough when the cipher of the globules oscillates between 80 and 100; it is met with again, but much seldomer, according as the cipher of the globules passes 100, and finally, it is no longer observed when the cipher of the globules is raised above the physiological mean.

Moreover, whatever is otherwise the nature of the disease in which these diminutions of the globules exist, the bruit de soufflet of the carotids does not show itself the less; I have proved its existence in the most different cases, putrid fevers, eruptive fevers, pneumonias, acute articular rheumatism, and in a great number of chronic diseases. But in all these cases it only took place with the ciphers of the globules marked above.

The bruit de soufflet is often present in women with child, which is in relation with the frequent diminution which the globules undergoes in them.

Ibid from Andral's Hématologie.

PHYSICAL CONDITION OF THE BLOOD IN PLETHORA.

The physical properties of this blood are perfectly explained by the nature of the changes which its composition has undergone. Thus, before coagulation, the blood in plethora is remarkable for its deep coloring, which is referable to the great proportion of the globules which it contains. When it is examined after coagulation, the serum is generally observed to be more or less colored, the clot is large, voluminous, of moderate firmness, and contains much serum; a buffy coat is never found on its surface; at most we are able to observe occasionally a thin and transparent pellicle, or some scattered rays, if the blood have flowed very rapidly from the vein. The considerable size of the clot manifestly depends on the great number of the globules; and its softness, as well as the constant absence of the buff, depends on the weak proportion of the fibrine relatively to that of the globules.

The superabundance of the red globules coincides in them with a certain modification of the physiological state, and thus with a certain number of pathological facts which appear to be a consequence of it. Thus, all the functions are generally more active, and there is a superabundance of life; digestion is quickly performed; respiration is favoured by the great developement of the thoracic cavity; the circulation is rapid; the heart beats with force; but it is wrong to admit, as he has done, that in like cases its beatings may be accompanied with *bruit de soufflet*. I have advanced this opinion myself, but more attentive and longer observation has convinced me that it was never so, and that, consequently, in cases where a *bruit de soufflet* in the heart or arteries has been observed in plethoric people, it was because the diagnosis was badly founded, and because, besides the plethora, there was another disease.

Individuals whose blood contains a superabundance of red globules are subject to some special accidents, of which hitherto a very satisfactory explanation has been given. Thus the vertigos, dimness of sight, noise in the ears, heat in the head, which they experience, have been explained by congestions of the blood to the brain; but these congestions have never been, in similar circumstances, anatomically stated, and the passage alone of a superabundant quantity of globules across the vessels of the encephalon appears to me a circumstance sufficient to account for it; but what is strange is, that if it happens, on the other hand, that globules in too small number traverse these small vessels, analogous accidents will yet present themselves, so that a quantity of globules, either too great or too small, trouble certain cerebral acts in the same manner.

Ibid, from Ibid.

PROGNOSIS IN CASES OF UTERINE HÆMORRHAGE.

Where recovery is to take place after uterine hæmorrhage, says Dr. M. Hall, the pallor of the countenance, the disposition to syncope, the coldness of the extremities, the feeble state of the pulse, and interrupted respiration, pass gradually away. Where the case is to terminate fatally, the symptoms gradually assume a more alarming aspect, the countenance becomes pale and sunk, the respiration stertorous, and the pulse cannot be felt at the wrist. There is great restlessness, and before death one or more fits of convulsions sometimes occur. Where recovery takes place in some women, it is astonishing how little permanent inconvenience is felt from the great loss of blood which they have sustained. In the course of ten days or a fortnight the effects have entirely disappeared; and this is the most common result. In some women, a violent determination of blood takes place to the brain, marked by heat, strong pulsation of the carotid and temporal arteries, intolerance of light, and all the symptoms of inflammation of the brain or its membranes. A strong febrile attack is also sometimes experienced without an increased determination of blood to any particular organ. These affections of the brain and nervous system are aggravated by depletion. The patient should be kept in a cool, dark room, and mild cathartics, anodynes, and antispasmodics, occasionally given. Where there is much headache and throbbing, a few leeches should be applied to the temples, and a cold lotion to the scalp.—*Dr. Lee, in Prov. Med. Journ.*

STOMATITIS ULCEROSA.

Under this name Dr. Stober describes an ulceration of the inner surfaces of the cheeks and the edge of the tongue, which is deep and uneven, and have edges which bleed easily, and a dirty greyish-yellow bottom. It attacks only one side of the mouth, is oblong, and exactly corresponds with the dental arch, so that when the mouth is shut the ulcerated parts touch the teeth. The teeth are covered with tartar; the breath is fœtid, and the glands on the affected side of the neck are swollen. The author believes incrustation or caries of the teeth to be the cause of the disease.—*Med. Gaz.*